

In the Claims:

1. A pre-crash assessment system, having a first target object in a near zone of a host object in motion, comprising:

5 a remote sensor coupled to the host object for detecting a first target object dynamic;

a status monitoring sensor coupled to the host object for detecting a host object dynamic;

a first safety device actuator, coupled to the host object, for activating a first safety device;

10 a first safety device activation specification defining a first threshold for said first safety device actuator; and

a safety device controller, coupled to the host object for generating a threshold criteria
15 assessment based on said host object dynamic and said first target object dynamic, said controller estimating future positions of the host object and the first target object, said controller further estimating whether a potential for crash between the host object and the
20 first target object is within said first threshold for said first safety device actuator, said safety device controller further controlling said first safety device actuator in response to said threshold criteria assessment.

25 2. The system of claim 1, further comprising multiple target objects in the near zone of the host object.

3. The system of claim 1, wherein said controller further comprises a tracking filter.

9. The method of claim 8, wherein said step of sensing further comprises the step of sensing a plurality of target vehicles in said near zone of the host vehicle.

5 10. The method of claim 8, wherein said step of calculating a future position of said first target vehicle further comprises the step of filtering future positions of said first target vehicle.

10 11. The method of claim 8 wherein said step of estimating further comprises the step of estimating acceleration of said first target vehicle.

15 12. The method of claim 8, wherein said step of determining further comprises the step of determining whether said potential for collision of the host vehicle and said first target vehicle is within a second safety device activation threshold.

 13. A pre-crash assessment system, having a first target vehicle in a near zone of a host vehicle, comprising:

20 a high frequency remote sensor, coupled to the host vehicle, for detecting a first target vehicle dynamic;

 a status monitoring sensor coupled to the host vehicle for detecting a host vehicle dynamic;

25 a first safety device actuator, coupled to the host vehicle for activating a first safety device;

 a first safety device activation specification defining a first threshold for said first safety device actuator;

